38th System Operation European Stakeholder Committee (SO ESC)

Meeting Minutes

Date: 6 October 2026
Location: Brussels / Microsoft Teams

Name	Affiliation	Role
Uros Gabrijel	ACER	Chairperson
Georgios Antonopoulos	ACER	Observer
Jan KOSTEVC	ACER	Guest
Lucija ZALETEL	ACER	Guest
Marco Pasquadibisceglie	ARERA	Observer
Marc Malbrancke	CEDEC	Member
Florentien Benedict	CEDEC/DSO Entity	Member
Angelo Lo Brutto	CENELEC	GC Member
Serdar Bolat	DSO Entity	Member
Tony Hearne	DSO Entity	Member
Andrea Hamzova	DSO Entity	Member
Daniel Vig	EASE	Member Substitute
Santiago Gallego Amores	EDSO	Member Substitute
Abel Santamaria	EDSO	Member
Bernhard Schowe-von der Brelie	EFAC	GC Member
Gamze Dogan	ENTSO-E	Member
Marco Zaccaria	ENTSO-E	Member
Cherry Yuen	ENTSO-E	Member
Nalan Buyuk	ENTSO-E	Member
Georgia Patsaroucha	ENTSO-E	Member
Jan Sedlacek	ENTSO-E	Member
Ignacio Iriarte Ramírez	ENTSO-E	Member
Martijn De Haas	ENTSO-E	Member
Luca Ortolano	ENTSO-E	Member

Rafal Kuczyński	ENTSO-E	Member
Joao Moreira	ENTSO-E	Guest
Benedict Englisch	ENTSO-E	Guest
Anuhya Chen	ENTSO-E	Guest
Flemming Brinch Nielsen	ENTSO-E	GC Member
Juárez Moreno Omar	ENTSO-E	GC Member
Luca Guenzi	EU Turbines	Member
Steffen Eckstein	EU Turbines	Member Substitute
Herve Biellmann	EU Turbines	Member Substitute
Freddy Alcazar	EUGINE	Member
Srinivasa Raju Addala	EUGINE	Member Substitute
Arthur Hubert	EURELECTRIC	Member
Jakub Fijalkowski	European Commission	Observer
Marta Poncela Blanco	European Commission	Observer
Pavla Erhartova	Europex	Member
Mike Kay	GEODE	Member
Erno Leväniemi	GEODE	GC Member Substitute
Rainer Fronius	VGB Powertech	Member
Klaus Oberhauser	VGB Powertech	Member
Jannis Burger	Energy Storage Europe	Member

1. Opening

1.1 Review of the Agenda and Approval of Last Meeting Minutes

The Chair, Uros Gabrijel, opened the SO ESC meeting and presented the agenda. No additional points were raised by stakeholders. The agenda was confirmed as presented. Similarly. the minutes of the previous meeting were also approved without additional changes.

1.2 Review of Actions

Cherry Yuen (ENTSO-E) reviewed the open actions. One action concerning the draft Terms of Reference for the Expert Group related to Recommendation #11 of the Iberian Blackout final report was noted as requiring discussion under the dedicated agenda item 6.3. The action related to Incident Classification Scale methodology (ICSm) and Annual Load Frequency Control (ALFC) report is closed. No further discussion was recorded on the remaining actions.

2. Update on the Implementation Actions at Pan-EU Level

Cherry Yuen (ENTSO-E) provided a short update on implementation actions at pan-European level. It was announced that the Expert Panel final report on the 4 July incident in Czech Republic had been published (link). ENTSO-E also informed stakeholders that the 2025 ALFC report had recently been published (link). No questions or comments were raised by stakeholders.

3. Outage Planning Coordination

Anuhya Chen (ENTSO-E) presented an update on Outage Planning Coordination (OPC), focusing on recent coordination and regulatory engagements. The presentation referred to the Energy Union Task Force work on mid-term measures, including outage planning coordination, the 2025 compliance inquiry on OPC and STA tasks, and the RCC monitoring reports published in 2025.

The discussion focused mainly on the RCC monitoring reports and the inclusion of generating units and demand facilities in the outage planning coordination process. ENTSO-E reported that a dedicated call had taken place between ACER and OPC experts to discuss the topic. TSOs confirmed that these units are already considered through IGM and CGM modelling and may also be treated as relevant assets through quantitative and qualitative criteria.

TSOs nevertheless highlighted the need to clarify the practical expectations and feasibility of integrating these significant grid users into the OPC process. It was noted that another dedicated call with ACER and OPC experts is expected towards the end of the year, taking into account that RCCs and TSOs are currently occupied with the yearly outage coordination process.

The Chair, explained that the SOGL framework anticipates a certain level of flexibility from generators and demand facilities in outage planning, particularly where maintenance or outages of significant assets may affect cross-zonal capacities or contribute to price spikes. Klaus Oberhaus (VGB Powertech) observed that relevance for cross-zonal issues depends on the node where assets are connected and suggested that only units located at relevant nodes may need to be considered in this context. The feedback will be taken into account in further TSO coordination.

4. Updates from the DSO Entity

Florentien Benedict (EU DSO Entity) presented the EU DSO Entity's key system operation actions for 2026. In response to ACER's informal request, the EU DSO Entity prepared a dedicated paper for ACER and for discussion with stakeholders. The paper includes 14 key points derived from general insights and preliminary recommendations following the Iberian Blackout study, grouped under three broad areas: data, system operation and the inclusion of new technologies.

The EU DSO Entity underlined that collaboration is essential for active system management and asked stakeholders to ensure that DSOs are sufficiently considered in the future SOGL revision. It was noted that the current SOGL focuses mainly on TSO needs and rights for overall system operation, while DSOs also need adequate rights and responsibilities to support the energy transition, active system management, flexibility and energy sharing.

The EU DSO Entity also referred to the ICS methodology and reiterated its request that DSOs or the EU DSO Entity should be included in future Expert Panel analyses of system incidents. The current wording allows the ICS Expert Panel to invite DSO technical experts depending on the nature and impact of an incident. The EU DSO Entity requested stronger wording to ensure DSO involvement, either through a revision of the ICS methodology, through SOGL 2.0, or through both routes.

No comments or questions were raised by stakeholders following the presentation.

5. Any Other Business

No additional SO ESC points were raised under AOB.

6. Joint SO ESC/GC ESC Session

6.1 Inertia Project Phase 2 – Conclusions

Luca Ortolano (ENTSO-E) introduced the topic by clarifying the distinction between Project Inertia and the SOGL Article 39 inertia assessment methodology. Project Inertia analyses long-term resilience challenges associated with low-inertia scenarios and system splits, whereas the SOGL methodology focuses on periodic assessments of minimum inertia requirements under normal operation.

Joao Moreira (ENTSO-E) presented the conclusions of Project Inertia as the project has reached its final phase. The conclusions consolidate previous studies and stakeholder feedback. The study confirms that declining inertia levels could increase system vulnerability in the event of severe system splits if no mitigating actions are taken. The project therefore proposes a phased and "no-regret" approach to improving resilience.

The key recommendations presented were:

- Enable meeting a minimum inertia metric (Hmin) of 2 seconds for each control area for 50% of the time by 2035.
- A more ambitious long-term target extending the duration over which the metric should be met.
- Continued deployment of additional response measures and technologies capable of providing inertia or synthetic inertia.
- Integration of long-term inertia assessments into the regular TYNDP process.

ENTSO-E emphasized that:

- The proposed metric is not a security criterion and does not guarantee the avoidance of blackouts.
- The recommendations are intended to improve resilience against severe system-split scenarios rather than eliminate all risks.
- The project does not prescribe specific implementation mechanisms or market arrangements.
- Renewable integration remains unconstrained within the study assumptions.

Stakeholders then raised several questions on the conclusions and possible follow-up to Project Inertia.

Tony Hearne (EU DSO Entity) asked about the distinction between the technical recommendations developed under Project Inertia and any future implementation mechanisms. ENTSO-E clarified that the project provides technical guidance and resilience targets only. Decisions on implementation mechanisms, market arrangements or regulatory follow-up remain outside the scope of Project Inertia.

Luca Guenzi (EU Turbines) asked about how the normalisation of the H metric was made. Joao (ENTSO-E) clarified that the base value used referred to the total hourly generation for long-term scenarios.

Raju Srinivasa (Eugene) asked how those recommendations will be implemented and if there will be requirements on generators or if the responsibility will be for system operator to ensure the inertia level. ENTSO-E explained that the project does not prescribe technology-specific obligations and does not define who should provide the required capabilities. Mature technologies with capabilities should be considered as well as the new technologies expected to enter the system. ENTSO-E clarified that Project Inertia does not prescribe specific technologies, locations or market arrangements

Arthur Hubert (Eurelectric) asked about the usage of the inertia potential of technologies already in the system. Joao (ENTSO-E) clarifies that the study raises awareness on the importance of inertia and to take action where possible, with the proper requirements. For inverter-based resources, there is a large inertia potential. Arthur then asked about the evolution of the performance if the 2035 scenarios were used compared to the 2030 scenarios from the study. ENTSO-E clarified that, using the no regret assumptions, the results would be more challenging.

ENTSO-E clarified that the Hmin value is intended as a long-term resilience metric for system-split scenarios and should not be understood as a real-time operational security criterion or as a guarantee that blackouts can be avoided.

Rainer Fronius (vgbe) asked about the information on the system splits studies to identify where the problem is. ENTSO-E clarifies that, as it is impossible to predict the

system split line, it is important to look at the full spectrum and acknowledge the general need for inertia and balanced efforts.
Freddy Alcazar (Eugene) asked about the relationship between Project Inertia and national initiatives, such as the German inertia market. ENTSO-E indicated that national initiatives may inform future implementation discussions, but that the project itself remains focused on pan-European technical recommendations and foresees regular reassessment through future TYNDP cycles.

6.2 Proposal for Common Expert Group Terms of Reference Boilerplate

The Chair informed the stakeholders that, unlike under the GC ESC, no boilerplate Terms of Reference (ToR) currently exists for Expert Groups established under the SO ESC. The need became apparent during the preparation of the draft ToR for the planned Expert Group on non-observable embedded generation.

The proposed document would address general governance aspects, including:

- Roles and responsibilities of members and chairs;
- Procedures for establishing Expert Groups;
- Organisational and reporting arrangements common to all Expert Groups.

Stakeholders expressed support for the initiative and agreed that a common structure would simplify future Expert Group creation while maintaining flexibility to address specific project needs.

Action: ENTSO-E and EU DSO Entity to share the boilerplate ToR for stakeholder's review, and then for approval at the next joint ESC meeting.

6.3 Expert Group on Monitoring of Non-Observable Embedded Generation (Recommendation #11 – Iberian Blackout)

Florentien Benedict (EU DSO Entity) and Cherry Yuen (ENTSO-E) provided an update on the draft Terms of Reference for the proposed Expert Group addressing Recommendation #11 of the final Iberian Blackout report concerning non-observable embedded generation.

ENTSO-E explained that:

- Drafting of the ToR started during summer 2026.
- The document is being developed jointly with the EU DSO Entity.
- The version circulated prior to the meeting reflected the ENTSO-E proposal while incorporating comments available at that time from the EU DSO Entity.
- Further refinements are expected before finalisation.

The Chair proposed organising a dedicated online workshop once a consolidated draft becomes available. The intention is to:

- Share the near-final draft with stakeholders.
- Collect comments and feedback.
- Discuss outstanding issues in a dedicated webinar.
- Reach consensus before formal approval at the December ESC meetings.

Stakeholders supported the proposed pragmatic approach and agreed that work of the Expert Group could begin before formal approval if consensus is reached on the scope. Stakeholders also noted that this approach had previously been used successfully within GC ESC Expert Groups.
Action: ENTSO-E and EU DSO Entity to share the consolidated draft version with stakeholders when ready and plan for a dedicated workshop to address stakeholders' comments.

Any Other Business

No additional points were raised under AOB during the joint SO ESC/GC ESC session. The Chair thanked participants and closed the meeting.